Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

1 Identification

- · Product identifier
- · Product name:
- \cdot Relevant identified uses of the substance or mixture and uses advised against
- · Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

· Emergency telephone number:

For Chemical Emergency ONLY (in the case of fire, leak, spill, exposure or accident) call CHEMTREC at

or CHEMTREC India at For all other emergencies call

Emergency Control Room

2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Liq. 4 H227 Combustible liquid. Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- · Label elements
- · Hazard pictograms





GHS07

GHS09

- · Signal word Warning
- · Hazard-determining components of labeling:

· Hazard statements

Combustible liquid.

Causes skin irritation.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

P210 Keep away from flames and hot surfaces. – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

(Contd. on page 2)

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

(Contd. of page 1)

Wear protective gloves/protective clothing/eye protection/face protection. P280

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell. P312

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1Fire = 2

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



1 Health = 1

Fire = 2

- · Other hazards No information available.
- · % of unknown toxicity: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixture

Mixture of the substances listed below with nonhazardous additions/ unknown toxicity.

Dangerous components:

Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Skin Irrit. 2, H315; STOT SE 3, H336

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

· Inhalation:

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

· Skin Contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

Remove contaminated clothing and shoes.

Wash clothing before reuse.

Clean shoes thoroughly before reuse.

(Contd. on page 3)

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

(Contd. of page 2)

· Eye Contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· Ingestion:

Wash out mouth with water. Drink plenty of water and provide fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

· Most important symptoms and effects, both acute and delayed

Causes skin irritation.

May cause drowsiness or dizziness.

· Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Treat symptomatically.

5 Fire-fighting measures

- · Extinguishing media In case of fire use the following suitable extinguishing agent.
- · Suitable extinguishing agents: CO2, Powder, Foam
- · For safety reasons unsuitable extinguishing agents:

Water with full jet

Water spray

· Special hazards arising from the substance or mixture

Flammable liquid and vapour.

Runoff to sewer may create fire or explosion hazard.

· Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

· Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective clothing.

Keep away from ignition sources

Ensure adequate ventilation

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Stop leak if without risk.

Move containers from spill area.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

(Contd. on page 4)

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

Ensure adequate ventilation.

(Contd. of page 3)

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Put on appropriate personal protective equipment.

Do not ingest.

Avoid contact with eyes, skin and clothing.

Avoid breathing vapour or mist.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

- · Information about storage in one common storage facility: Store away from
- Further information about storage conditions: Keep receptacle tightly sealed.
- · **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Exposure controls
- · Appropriate engineering controls:

Use local exhaust ventilation or other engineering control to maintain airborne levels below exposure limit requirement or guldelines.

If there are no applicable exposure limit requirement or guidelines, general ventilation should be sufficient for most operations.

Local exhaust ventillation may be necessary for some operations.

- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Where there is potential for airborne exposures, wear NIOSH approved respiratory protection.

(Contd. on page 5)

Page 5/10

Safety Data Sheet Conforms to OSHA Hazard Communication Standard (HCS) 29CFR 1910.1200

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

(Contd. of page 4)

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Neoprene or nitrile gloves.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

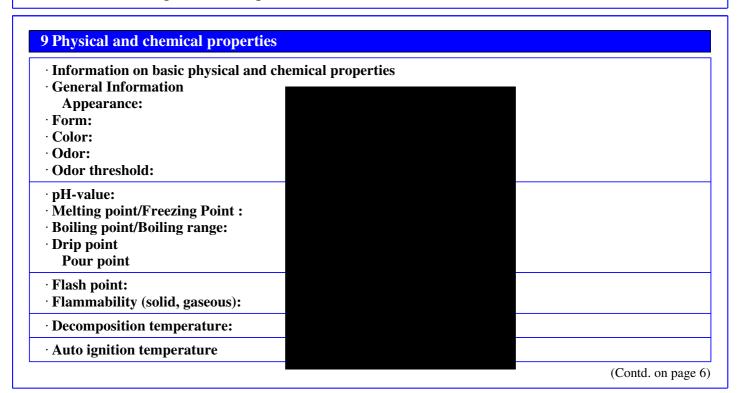
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment No further information available.



Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

· Vapor pressure:
· Relative density at 15.6 °C (60.1 °F)
· Vapor density
· Evaporation rate
· Solubility(water):
· Partition coefficient (n-octanol/water)

· Viscosity:
 Dynamic:
 Kinematic at 40 °C (104 °F):

10 Stability and reactivity

- · Reactivity Under normal conditions of storage and use, hazardous reactions will not occur.
- **Chemical stability** The product is stable under storage at normal ambient temperature.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:
- · Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

Acute Toxicity Estimate (ATE) of product

		>5,000 mg/kg bw (Rat)
Dermal	LD50 (ATE)	>5,000 mg/kg bw (Rabbit)
Inhalative	LC50 (ATE)	>20 mg/L (Rat)

- **Primary irritant effect:**
- · on the eye: No irritating effect.
- · Germ cell mutagenicity: No known significant effects or critical hazards.
- · Carcinogenicity: No known significant effects or critical hazards.
- **Reproductive toxicity:** No known significant effects or critical hazards.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NTP (National Toxicology Program)

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

(Contd. on page 7)

Page 7/10

Safety Data Sheet Conforms to OSHA Hazard Communication Standard (HCS) 29CFR 1910.1200

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

(Contd. of page 6)

- · Single dose toxicity: May cause drowsiness or dizziness.
- · Repeated Dose toxicity No known significant effects or critical hazards.
- · Aspiration hazard No known significant effects or critical hazard.

12 Ecological information

- · Toxicity This product is toxic to aquatic life with long lasting effects.
- · Aquatic toxicity:

EC50 (48 h) >1 mg/L (Daphnia)

LC50 (96 h) >1 mg/L (Fish)

- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment No data available
- · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

 $\cdot \, UN\text{-}Number$

• **DOT** NA1993 • **ADR, IMDG, IATA** UN3082

(Contd. on page 8)

(Contd. on page 9)

Safety Data Sheet Conforms to OSHA Hazard Communication Standard (HCS) 29CFR 1910.1200

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name: (Contd. of page 7) · UN proper shipping name \cdot DOT COMBUSTIBLE LIQUID, N.O.S (),MARINE POLLUTANT \cdot ADR 3082 Environmentally hazardous substances, liquid, n.o.s. (· IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, MARINE POLLUTANT ·IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. · Transport hazard class(es) \cdot DOT · Class 3 Combustible liquids ·Label · ADR · Class 9 (M6) Miscellaneous dangerous substances and articles ·Label · IMDG, IATA · Class 9 Miscellaneous dangerous substances and articles ·Label · Packing group · DOT, ADR, IMDG, IATA · Environmental hazards: Product contains environmentally hazardous substances: · Special marking (ADR): Symbol (fish and tree) · Special marking (IATA): Symbol (fish and tree) · Special precautions for user Warning: Miscellaneous dangerous substances and articles · Danger code (Kemler): 90 · EMS Number: F-A,S-F

Page 9/10

Safety Data Sheet Conforms to OSHA Hazard Communication Standard (HCS) 29CFR 1910.1200

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

(Contd. of page 8)

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

• **Remarks:** Special marking with the symbol (fish and tree).

· **DOT** Non Bulk:Not Regulated

Non-bulk: A maximum capacity of 450L(119 gallons)

· IMDG

· Limited quantities (LQ) 0

15 Regulatory information

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- · TSCA (Toxic Substances Control Act): Not determined.
- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. on page 10)

Page 10/10

Safety Data Sheet Conforms to OSHA Hazard Communication Standard (HCS) 29CFR 1910.1200

Printing date 09/20/2018 Version number 1 Reviewed on 09/20/2018

Product name:

(Contd. of page 9)

16 Other information

File name:

Superseded SDS date: Not applicable Change History: Not applicable

· **Note** Conforms to UNGHS Rev.3(2009)

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

APF = Assigned protection factor

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

IOELV: Indicative Occupational Exposure Limit Values

Flam. Liq. 4: Flammable liquids – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

· Disclaimer:

The data and recommendations presented in this data sheet concerning the use of our product and the materials contain there in are believed to be accurate and are based on information which is considered reliable as of the date hereof. However, the customer should determine the suitability of much material for his purpose before adopting them on a commercial scale. Since the use our product by others is beyond our control, no guarantee, express or implied, is made and no responsibility assumed for the use of this material or the results to be obtained there from. Information on this document is furnished for the purpose of compliance with Government Health and Safety Regulations and shall not be used for any other purposes. Moreover, the recommendations contained in this Safety Data Sheet are not to be constructed as a license to operate under, or a recommendation to infringe, any existing patents, nor should they be confused with state, municipal or insurance requirements, or with national safety codes.